

Department of Infection, Immunity and Inflammation Institut Cochin, France Postdoctoral Research Associate in Rho GTPases in rare diseases

Applications are invited for a postdoctoral research fellow position in the Department of Infection, Immunity and Inflammation at the Institut Cochin in Paris, France. She/he will join the research group headed by Jerome DELON, which is specialized in the analysis of Rho GTPases functions in the immune system.

https://www.institutcochin.fr/departments/3i/team-randriamampita/role-of-rho-gtpases-in-the-immune-system

We have previously characterized the role of Fam65b, a RhoA inhibitor, in T cell migration and activation (1-3). More recently, we have focused our studies on mutations in Rho GTPases or in proteins involved in the Rho circuits which have all been identified in several patients who exhibit rare diseases. The present proposal aims at understanding at the molecular and cellular levels how such mutations give rise to severe syndromes. To do so, we will combine high-resolution microscopy and biochemical analysis of diverse cellular models. This project will be developed in collaboration with the groups of Asma Smahi (specialist of autoinflammatory diseases at Institut Imagine), Jacqueline Cherfils (biophysicist at ENS Cachan) and Pierre Vabres (dermatologist at Dijon Bourgogne Hospital).

The position is funded for a period of two years that might be extended.

Candidates appointed should have a PhD in Immunology or Cell Biology with a solid background in cell imaging, biochemistry and signaling. The project also requires basic cell culture and molecular biology techniques.

Candidates should be strongly motivated, and skilled to interact with several groups. We offer a rich multidisciplinary environment, as well as access to different experimental approaches through our labs, departments and core facilities to ensure the successful development of the research.

Motivation + recommendation letters and CV should be sent to: jerome.delon@inserm.fr

- 1/ Megrelis L. et al., (2018) Fam65b phosphorylation relieves tonic RhoA inhibition during T cell migration. Front. Immunol. 9:2001.
- 2/ Froehlich J. et al., (2016). FAM65B controls the proliferation of transformed and primary T cells. Oncotarget, 7(39):63215-63225.
- 3/ Rougerie P. et al., (2013). Fam65b is a new transcriptional target of FOXO1 that regulates RhoA signaling for T lymphocyte migration. *J. Immunol.*, 190(2):748-55.

